

Sequencing in a curriculum is important for student knowledge building and understanding. The Australian science curriculum contains multiple examples of poor sequencing. Consider, for example, reproduction in plants and animals. In Singapore's curriculum, these topics are sequenced over multiple years. In the Australian science curriculum, this content is specifically introduced and covered in Year 9.

Reproduction in plants and animals

Singapore	Australia	
<ul style="list-style-type: none"> Describe the characteristics of living things: <ul style="list-style-type: none"> - need water, food, and air to survive - grow, respond, and reproduce 	Year 3	
	Year 4	
<ul style="list-style-type: none"> Show an understanding that living things reproduce to ensure continuity of their kind and that many characteristics of an organism are passed on from parents to offspring. Recognise processes in the sexual reproduction of flowering plants. <ul style="list-style-type: none"> - pollination - fertilisation (seed production) - seed dispersal - germination Recognise the process of fertilisation in the sexual reproduction of humans. Recognise the similarity in terms of fertilisation in the sexual reproduction of flowering plants and humans. 	Year 5	
	Year 6	
<ul style="list-style-type: none"> Recognise that the union of the nuclei of an egg and a sperm (inputs of a system) forms a fertilised egg which develops into a new individual (output of a system) Recognise that the sexual reproductive system facilitates heredity (the passing down of genetic material from one generation to the next) Describe briefly how the parts of the human male and female reproductive systems are involved in fertilisation 	Year 7	
	Year 8	
	Year 9	<ul style="list-style-type: none"> Describe the form and function of reproductive cells and organs in animals and plants, and analyse how the processes of sexual and asexual reproduction enable survival of the species

Note: The content description in Year 8 biological sciences in the Australian Curriculum refers to 'an animal and plant organ system' and so it is feasible that some students may study the reproductive system in plants or animals in Year 8. Singapore's science curriculum was not benchmarked beyond Year 8.